### **Puerto Rico**

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## **Purpose of the Procedure**

Flood Insurance Studies search for geospatial data during Discovery tasks. If needed data are not available, studies might fund the collection of new data and would like to know about other organizations that might share in these costs. Detailed information about the role geospatial data coordination plays in studies is in the *Geospatial Data Coordination Implementation Guide*, which is available at

https://hazards.fema.gov/femaportal/docs/GeoDataImplem.pdf.

Resources developed through FEMA's geospatial data coordination activities provide information about data and contacts for organizations that have geospatial data that cover large areas (like states) in which many studies are interested. Studies can avoid wasting time with dead-end searches and cold calls by starting with these proven sources of information.

One resource is this Geospatial Data Coordination Procedure. It outlines sources of geospatial data and contact information, preferences for base map data and state geospatial participation in flood insurance studies, information for the project Discovery stage, and other useful information for the Territory.

If you have questions about this procedure or other geospatial data coordination resources, contact the geospatial data coordination lead in your Regional Support Center (RSC):

Rosemary Bolich, Geospatial Data Coordination Lead Regional Support Center 2 (646) 490-3848 rosemary.bolich@stantec.com

### Default Flood Hazard Base Map for the Territory

The default base map for flood hazard maps for Puerto Rico is an orthoimagery-based map.

### **Geospatial Data Coverage**

Find below information about and links to statewide (and Federal agencies' national) geospatial datasets. The list is provided to save time during Discovery activities when building a list of candidate geospatial datasets available for the study; it is not a prescription of datasets that must be used in a Flood Insurance Study.

#### **Major Territory Holdings**

Puerto Rico has geospatial holdings for several datasets that may be appropriate for Flood Insurance Rate Map (FIRM) production. The primary geospatial data office is La Junta de Planificación. In order to get any data or metadata from La Junta de Planificación (<a href="http://www.jp.gobierno.pr/">http://www.jp.gobierno.pr/</a>), Mapping Partners must work through FEMA to request data and metadata by letter to the President of the Puerto Rico Planning Board. Requests for parcel data and metadata should be coordinated through El Centro de Recaudaciones de Ingreso Municipales (<a href="http://www.crimpr.net/portal/">http://www.crimpr.net/portal/</a>). Requests for transportation data and metadata should be coordinated through Departamento de Transportación y Obras (<a href="http://www.dtop.gov.pr/">http://www.dtop.gov.pr/</a>).

CRIM (Centro de Recaudación de Ingresos Municipales in Spanish) Land Information System Project has collected and maintains a number of planimetric data sets, including road centerlines, elevation, and hydrography. Most are at 1:2,000 or 1:5,000 scale. Data can be requested through the Puerto Rico Planning Board. Getting approvals may take time, but once secured, distribution is authorized.

### **Data Distribution Process for Territory Data**

The GIS clearinghouse for Puerto Rico is maintained by La Junta de Planificación at <a href="http://www.jp.gobierno.pr/">http://www.jp.gobierno.pr/</a>. See the Major Territory Holdings section for more details on the data distribution process for other datasets.

#### **Useful Risk MAP Discovery Data Sources**

Preliminary information on Discovery data sources is provided in this document to reduce the level of effort needed on each subsequent Discovery data collection effort.

Coordination with local community sponsors for additional local data still remains an integral part of Discovery and local data should be used where appropriate.

The National Discovery Data Coordination Procedure document contains information on data resources available from other Federal agencies (OFAs), including those that FEMA maintains at the national level, and should be used in conjunction with this State Geospatial Data Coordination Procedure document. In addition, FEMA and its contractors have created a geospatial Discovery Data Repository to host data that are not readily accessible through direct sources such as Web sites or subscription services and/or are not updated on a frequent basis. Instructions on accessing the Discovery Data Repository are given in the National Discovery Data Coordination Procedure document.

Table 1 identifies data resources that are available at the regional and State levels, and also if there are no data available other than the national datasets. Resources in this table have been identified as appropriate for Discovery projects and may not represent the best data sources for FIRM production (please see the Major State Holdings section of this document for geospatial data that meets FIRM production requirements).

Table 1: Discovery Data Resources

<u>Data</u>	<u>Agency</u>	<u>Location</u>
Watershed boundaries	National	See National Discovery Data Coordination Procedure
Jurisdictional boundaries	Planning Board National	http://www.jp.gobierno.pr/
		Government Center
		Bldg Minillas Norte, Piso 16
		Santurce, PR
		(787) 723-6200
		(101) 123-0200
		See National Discovery Data
		Coordination Procedure
m 1 11 11 1 1 1	NT/A	
Tribal land boundaries	N/A	N/A
State lands	Planning Board	http://www.jp.gobierno.pr/
		Government Center
		Bldg Minillas Norte, Piso 16
		Santurce, PR
		(787) 723-6200
Federal lands	National	See National Discovery Data
		Coordination Procedure
Major roads	Highway and	https://act.dtop.pr.gov/
1124301 10445	Transportation	
	Authority (ACT)	José De Diego Ave Minillas
		Government Center South Bldg, Floo
		10
		Santurce, PR
		(787) 721-8787

<u>Data</u>	<u>Agency</u>	<u>Location</u>
	National	See National Discovery Data Coordination Procedure
Streams	National	See National Discovery Data Coordination Procedure
Coastal Barrier Resource Areas	National	See National Discovery Data Coordination Procedure
Coordinated Needs Management Strategy	National	See National Discovery Data Coordination Procedure
Topographic/ bathymetric data	Planning Board National	http://www.jp.gobierno.pr/  Government Center Bldg Minillas Norte, Piso 16 Santurce, PR (787) 723-6200  See National Discovery Data Coordination Procedure
AAL data from Hazus	National	See National Discovery Data Coordination Procedure
Coverage areas for known community and Tribal risk assessment data	Local	Local
Status of Hazard Mitigation Plans	National	See National Discovery Data Coordination Procedure
Flood control structure data	National	See National Discovery Data Coordination Procedure
Locations of stream gages	National	See National Discovery Data Coordination Procedure
Locations of past flood claims and repetitive loss properties	National	See National Discovery Data Coordination Procedure
Locations of clusters of Letters of Map Change	National	See National Discovery Data Coordination Procedure
Known flooding issues not represented on effective FIRMs or listed in Coordinated Needs Management Strategy database	University of Puerto Rico Sea Grant Program	http://nsfctw.uprm.edu/ Prof. Aurelio Mercado Tel./Fax: 787-265-5461 email: aurelio.mercado@upr.edu
Areas of planned development	The Land Administration	http://www2.pr.gov/Directorios/Pages/ InfoAgencia.aspx?PRIFA=177  171 Carlos Chardón Avenue Suite 101, Hato Rey, PR (787) 753-9300
Areas of land use change datasets	Local	Local
Locations of ongoing projects or	Local	Local

<u>Data</u>	<u>Agency</u>	<u>Location</u>
updated stream studies (e.g. highway improvements)		
Locations of wave and tide gages	National	See National Discovery Data Coordination Procedure
Locations of wind gages	National	See National Discovery Data Coordination Procedure
Proposed inland limit of the Primary Frontal Dune, if present	Local	Local
Locations of any beach nourishment or dune restoration projects Required	Local	Local
Comparison of preliminary stillwater elevations with effective stillwater elevations	Local	Local
Available effective study data	National	See National Discovery Data Coordination Procedure
Orthophotography	National	See National Discovery Data Coordination Procedure
Proposed discussion areas, problem areas, areas of proposed mitigation projects	Local	Local
Land use and soil information	The Land Administration	171 Carlos Chardón Avenue Suite 101 Hato Rey, PR (787) 753-9300
	National	See National Discovery Data Coordination Procedure
Reference points to locate areas with flooding issues	Local	Local
Hydraulic structures	National	See National Discovery Data Coordination Procedure
Coastal structures, including flood protection structures, shoreline structures, manmade embankments, surge conveyance pathways, and shoreline change data	Division of Coastal Zone, Natural Resource Management	http://www.drna.gobierno.pr/oficinas/ arn/recursosvivientes/costasreservasre fugios/pmzc  Carretera 8838, km. 6.3, Sector El Cinco, Río Piedras, PR (787) 999-2200
Local structure and topographic data from the existing hazard mitigation plans	Local	Local
Historic inundation areas and High Water Marks	Regional	Discovery Data Repository
Clusters or locations of Individual Assistance/Public Assistance grants and locations of grant projects completed, planned, or underway	National	See National Discovery Data Coordination Procedure
Locations of projects and structures	National	See National Discovery Data

<u>Data</u>	Agency	<u>Location</u>
completed or planned for FEMA Hazard Mitigation Assistance grant programs or mitigation funds from other agencies or entities, such as the Small Business Administration		Coordination Procedure
Other information on FEMA grants, as described in G&S Appendix I	Local	Local
Any data deficiencies identified in hazard mitigation plans	Local	Local
Information from FloodSmart on market penetration	National	See National Discovery Data Coordination Procedure
Community Assistance Visits / Community Assistance Contacts	National	See National Discovery Data Coordination Procedure
Community Rating System class information	National	See National Discovery Data Coordination Procedure
Information from other Federal agencies	National	See National Discovery Data Coordination Procedure
Information from State agencies, non-profit organizations, universities, etc.	Puerto Rico Government Agencies	http://www2.pr.gov/Directorios/Pages/ DirectoriodeAgencias.aspx
Current community plans, ordinances, or programs to alleviate flooding or manage stormwater	National	See National Discovery Data Coordination Procedure
Other known hazards with geographical boundaries (e.g. earthquake faults)	University of Puerto Rico Sea Grant Program National	http://seagrantpr.org/ See National Discovery Data Coordination Procedure
Information on active disasters	National	See National Discovery Data Coordination Procedure
Campgrounds, recreational areas, emergency access routes, etc.	National	See National Discovery Data Coordination Procedure
Any other data that might be appropriate	Local	Local

### Federal Nationwide Geospatial Data Holdings

Information about nationwide holdings and programs of Federal agencies is available from at https://www.usgs.gov/core-science-systems/national-geospatial-program/national-map.

### Finding and Accessing Other Existing Geospatial Data

Find below information about and links to ways of searching for additional geospatial data available for the Territory. These capabilities can be useful for finding geospatial data other than the statewide and Federal data listed above, including those of special governments, counties and parishes, municipalities, tribes, universities, and other organizations.

### Clearinghouses and Inventories for the Territory

The GIS clearinghouse for Puerto Rico is maintained by La Junta de Planificación at <a href="http://www.jp.gobierno.pr/">http://www.jp.gobierno.pr/</a>.

### National Elevation Dataset (NED) and 3D Elevation Program (3DEP)

These systems allow the search of orthophoto and elevation project information entered by Federal and other organizations. The NEP system can be accessed at <a href="https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/ngce/elevation/">https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/ngce/elevation/</a>. The 3DEP system can be accessed at <a href="https://www.usgs.gov/core-science-systems/ngp/3dep">https://www.usgs.gov/core-science-systems/ngp/3dep</a>.

### Working with People

#### **Useful Territory and Federal Contacts**

The main contacts for the Territory's geospatial activities and Federal agencies' representatives in the Territory are available on the Mapping Information Platform web site at <a href="https://hazards.fema.gov/contacts/statecontacts/contacts.asp?page=PR">https://hazards.fema.gov/contacts/statecontacts/contacts.asp?page=PR</a>.

### Involving the Territory's Geospatial Coordinator in Flood Studies

The primary geospatial coordination is with La Junta de Planificación. More information about La Junta de Planificación can be found at <a href="http://www.jp.gobierno.pr/">http://www.jp.gobierno.pr/</a>.

### **Territory Coordination Process for Building Geospatial Partnerships**

Puerto Rico has a geospatial data center to promote data sharing, listed above in Clearinghouses and Inventories for the State.

#### **Finding Local Geospatial Contacts**

Local contacts, including those from special government districts (for example, a regional planning commission); counties, parishes, or equivalent governments; tribes, municipal governments; and other organizations (for example, local universities) also have geospatial data that can help a Flood Insurance Study. Contact information is available from the FEMA archive and web searches at government link portals such as <a href="https://hazards.fema.gov/contacts/statecontacts">https://hazards.fema.gov/contacts/statecontacts</a>.

#### Provide Feedback on This Procedure

When you find information in this Procedure or in other FEMA or Territory resources that are outdated, please tell the geospatial data coordination lead in the Regional Support Center what was wrong and the correct information (if you know it). Use the contact information for the lead listed in the section Purpose of the Procedure.

The lead will use your feedback to update this Procedure.